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NATIONAL ASSOCIATION of CORPORATION TRAINING BULLETIN

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Volume VIII

January, 1921

Industry Awards University Scholarship

The need for the training of those in the industries and the commerce of the United States is now generally recognized. The need for a larger degree of training with the view of developing employees into the higher positions of business management is just developing. When the public school system of the United States was fairly developed there came a recognition of the need for more intensive training of a much smaller number, those so trained to occupy the more important positions in the arts, sciences, and professions. Now there is similar recognition of the need for more intensively trained employees who will specialize in management, in technical development and in other positions requiring unusual ability and unusual knowledge. The feature article in this issue of the BULLETIN gives information regarding the beginning of this more intensive training development in the industries.

PUBLISHED BY ORDER OF THE
EXECUTIVE COMMITTEE

National Association of Corporation Training

Headquarters, 127 East 15th Street, New York, N. Y.

Objects

Corporations are realizing more and more the importance of education in the efficient management of their business. This Company school has been sufficiently tried out as a method of increasing efficiency to warrant its continuance as an industrial factor.

The National Association of Corporation Training aims to render new corporation schools successful from the start by warning them against the pitfalls into which others have fallen and to provide a forum where corporation school officers may interchange experience. The student is vested in the member corporations, thus admitting only so much of theory and scholastic activities as the corporations themselves feel will be beneficial and will return dividends on their investment in time and membership fees.

A central office is maintained where information is gathered, arranged and classified regarding every phase of industrial education. This is available to all corporations, companies, firms or individuals who now maintain or desire to institute educational courses upon becoming members of the Association.

Functions

The functions of the Association are threefold: to develop the efficiency of the individual employee; to increase efficiency in industry; to have the courses in established educational institutions modified to meet more fully the needs of industry.

Membership

From the Constitution—Article III.

SECTION 1.—Members shall be divided into three classes: Class A (Company Members) Class B (Members), Class C (Associate Members).

SECTION 2.—Class A members shall be commercial, industrial, transportation or governmental organizations, whether under corporation, firm or individual ownership, which now are or may be interested in the education of their employees. They shall be entitled, through their properly constituted representatives, to attend all meetings of the Association, to vote and to hold office.

SECTION 3.—Class B members shall be officers, managers or instructors of schools conducted by corporations that are Class A members. They shall be entitled to hold office and attend all general meetings of the Association.

SECTION 4.—Class C members shall be those not eligible for membership in Class A or Class B who are in sympathy with the objects of the Association.

Dues

From the By-Laws—Article V.

SECTION 1.—An initiation fee of \$100.00 shall be charged all new class "A" members in addition to annual dues.

SECTION 2.—The annual dues for membership in the National Association of Corporation Training shall be as follows:

The annual dues of Class "A" members shall be \$100.00

The annual dues of Class "B" members shall be 5.00

The annual dues of Class "C" members shall be 10.00

All dues shall be payable in advance and shall cover the calendar year. New Class "A" members joining between January 1 and April 1 shall pay first year's dues of \$100.00. Those joining between April 1 and July 1 shall pay nine months' dues or \$75.00. Those joining between July 1 and October 1 shall pay six months' dues or \$50.00. Those joining between October 1 and December 31, shall pay three months' dues or \$25.00.

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BULLETIN

Published Monthly by

NATIONAL ASSOCIATION OF CORPORATION TRAINING

130 E. 15th Street, New York, N. Y.

Edited by F. C. Henderschott, Managing Director

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No. 1.

MENTAL SCIENCE THE BASIS FOR INDIVIDUAL EFFICIENCY

The beliefs that the next twenty-five years will see a material advancement in mental science comparable to the advancement of the past twenty-five years in material developments, are based on something tangible, upon the economic need for such development.

The average citizen knows little of psychology—he suspects much. Psychology to the man on the street is something mysterious, something mythical, a plaything for the high-brow.

Actually psychology is an understanding of the human mind. To be sure, the science is new—perhaps not over fifteen per cent developed—but it is needed, and the development is rapidly taking place. There is nothing mysterious about the operations of the human mind or the characteristics of the brain. Every intelligent person recognizes the force of habit, but every intelligent person does not understand the various sub-divisions of the human mind which psychologists have made, nor do they understand the range of the mind or its limitations. How many intelligent people really know where knowledge ceases and belief begins? So long as the human being is finite, superstition must exist. It comes from that unknown, unfathomable force which is beyond the limits of knowledge. New beliefs are arising and flourishing, but back of it all there is still lack of comprehension, lack of understanding, as to how far the human mind may be expected to function, and under what conditions it will function best.

In his book on "Business Psychology," Hugo Munsterberg, generally recognized as one of the best psychologists of recent periods—especially in reference to the application of psychology to industry—discussed this problem.

"The gravity of the question is evident to everyone who looks with open eyes into the turmoil of mankind. However sad it may be, it cannot be denied that a majority of men and women

who have to fight in the struggle for existence themselves have the feeling that they do not stand in the right place. They feel disappointment, perhaps they consider themselves as failures, and yet they are instinctively convinced that in some other place and under some other conditions they could have done better and would have succeeded to a higher degree. They know that it is too late, or they do not even know in what direction to change. Too often life throws them cruelly on the street without any guarantee that they can find by their own efforts the place where they will do better.

"At the same time we hear from the employers everywhere the complaint that really efficient employes are lacking. Certainly in every bread-earning occupation there is plenty of room at the top. The most pitiful situation shows itself in the industrial establishments. In many large factories the average length of service is alarmingly short. 'In an institution manufacturing agricultural implements and employing on the average 2,400, 7,200 are employed every year. In a well-known steel mill 26,000 men pass annually through the institution in order to maintain an average working force of 8,000.' In not a few big establishments the changes in the personnel are still more rapid and certainly a complete turn over every year is not unusual.

"How could it be otherwise? Every year millions of boys and girls leave the schoolroom to find some occupation. Numberless motives lead them hither and thither, but how exceptional are the cases in which any attention at all is given to the most important condition of efficient life-work, the mental fitness of the worker for his task! The most superficial impulses determine the turns of the road. Chance information and chance advice, haphazard impressions of good opportunities, above all the accident of a vacant place, the wish to be with friends, the convenient location, family traditions, and a hundred other secondary features are decisive, while the primary factors are neglected. Wherever a strong talent exists, it, of course, finds its right setting, but the average is satisfied to be pushed passively into some chance group or actively to seek something with which he has no internal contact and in which he seeks, after all, merely an easy way to earn a living, unconcerned about the abilities, dispositions, and acquirements of his mind and brain."

No organization is doing so much to bring about the advancement of mental sciences as is the National Association of Corporation Training. Education and training are the solutions of all mental problems.

Ten years ago, so far as the writer has been able to ascer-

tain, no industrial institution included courses on psychology in their corporation schools. Now there are many such courses. The average person has little knowledge with which to reach a decision as to whether or not he is developing toward a useful and successful career. He may like his work. He may not. A mere liking for the tasks which one is performing has been proven a false guide as to the degree of success which may be attained. Oftentimes individuals have a strong liking for vocations for which they are wholly unfitted. The writer once knew an expert mechanic employed in one of the large shoe factories in New England. He was rated as the best Goodyear-welt operator in the community. His consuming ambition, however, was to go to Kansas, obtain a small piece of land, grow alfalfa, raise hogs and get rich. Finally he went to Kansas, raised hogs and went broke. He is again back operating his machine, but dreaming and talking of his next opportunity to go West, grow alfalfa, raise hogs and get rich.

The writer has knowledge of another mechanic who has held positions as master mechanic in some of the largest production plants in the country. His ambition is to be a financier. When he has money he is constantly in the stock market. He always purchases at or near the top and sells at or near the bottom. His years of experience have taught him nothing. He lacks the very fundamentals of a financier, but he loves the game. Such instances can be multiplied by every intelligent person almost innumerable. How then can the individual determine his fitness and apply himself toward a measurable degree of individual success? The answer here also lies in the field of education and training.

Psychological tests have been devised which will determine the developed intellect of the individual very accurately. Of course latent intellect cannot be measured. Rating tests, trade tests and other measuring scales have been devised, which will determine the skill of the craftsman. It is possible to determine whether a blacksmith is a novice, an apprentice, a journeyman or an expert. All trades may be measured equally well, but as yet there are no tests which will determine the latent possibilities of the individual. Perhaps such tests should not be expected. At any rate the need for a mental science is so imperative that the concentrated effort of the best minds will be given to the problem until a satisfactory solution is reached.

When this Association has been able to erect its commercial and industrial university, progress along this line will be increased. There will be facilities for making more intensive inves-

tigations and tests, and for drawing into the movement the best talent available.

MENTAL SCIENCE AND ITS IMPORTANCE TO THE INDUSTRIES AND TO COMMERCE

In a recent issue of the *BULLETIN* a statement was made that during the next twenty-five to fifty years a development could be expected in mental science, comparable to the progress of the last fifty years in the material world.

This development is now under way. Literature is appearing upon the subject, a study of which makes clear the lines along which the industries are working, particularly since the conclusion of the world war.

Special attention has been paid to the application of psychological studies to industrial and commercial problems. Pioneers in this line of effort were Hugo Munsterberg and Walter Dill Scott.

Under a somewhat different line of investigation and tests should be included the studies and the conclusions of Dr. Henry C. Link and Henry Herbert Goddard. Dr. Link's book describes the direct application of psychology to the selection, training and retraining of employees. Dr. Link outlines not only the methods used but concrete results obtainable paying particular attention to the development and use of mental tests.

Mr. Goddard, in a series of lectures before the students at Princeton University, centered his attention upon Human Efficiency and Levels of Intelligence.

Accepting the experiments made upon those drawn into the service of the country, those who entered the army branch of military service during the recent war, and using the total figure of 1,700,000 men, Mr. Goddard outlines the percentages of intelligence as revealed by the psychological tests which were applied to the army personnel.

While the conclusions reached are startling, they do not differ materially from the results found by other tests which have been used to determine the intelligence of individuals.

The army tests show that only four and one-half per cent of the 1,700,000 men examined succeeded in gaining an intelligence rating of "A." Nine per cent secured a "B" rating, and sixteen and one-half per cent a "C+" rating.

The largest number were rated "C" being twenty-five per cent. Twenty per cent secured "C—," fifteen per cent a "D" rating, and ten per cent "D—" or an "E" rating. Applying

this rating to the citizenry of the country as a whole, the results are discouraging. Nevertheless the ratings are probably accurate.

While intelligence is not the only factor that must be considered in determining qualifications for success, it is, however, the most important factor.

Those who secured a "D—" and an "E" rating were not sent to Europe. Eighty-three per cent of the officers who went to France were selected from those who secured either an "A" or "B" rating.

These facts unquestionably account for the efficiency of the American Army in France.

Best authorities agree that intelligence ratings are most important in social life, and in political, educational and industrial developments. The ultimate results obtained as to the degree of intelligence of individuals is not a matter for further consideration at this time, rather are we concerned with the effects of these demonstrated facts upon industry and commerce.

Indirectly, of course, if the industries and commerce are to be made more democratic, the problems of selecting men for given tasks must assume increasing importance.

It is clear that if a total of only thirteen and one-half per cent of all of the people in the United States can secure an intelligence rating of "B" or higher, the great masses must work under the direction of this relatively small percentage, and the importance of having those of high intelligence direct the industries and commerce cannot be overestimated. In fact, the importance of the whole problem of mental science and the application of this science to the industries and the commerce of the country is so great that increasing attention will undoubtedly be given to tests and ratings in choosing those to be in charge of the management of business organizations and the developments which may be confidently looked for through the application of psychology to business administration.

The Association's Sub-committee on "psychological tests and other rating scales" will keep our members advised of the progress of this movement through their reports which are submitted to the annual conventions.

MUTUAL CONFIDENCE AND CORDIAL COOPERATION THE BEST ECONOMIC POLICY

Judge Gary, Chairman of the Board of the United States Steel Corporation, is recognized as one of the best authorities upon economic conditions and economic problems. Recently in-

interviewed by a representative of the Magazine of Wall Street, he stated:

"I consider it highly improbable that business will suffer any serious reaction or depression. There are no fundamental deficiencies in our resources or in our business opportunities. Those who have become discouraged by the fall of prices in some lines have only to look about them and take a broader view to see that conditions are fundamentally sound and that price reductions are in line with a conservative and farsighted business policy.

"To select a single example from many which might be mentioned, the resources of the banks of the United States now exceed the combined bank assets of all the other leading nations of the world. Wealth has flowed to our shores and has poured forth from our factories, fields and mines. Our labor is the best and most intelligent in the world.

"It is true that our Government has incurred a big indebtedness for war purposes, but these Government bonds are nearly all owned by our own citizens. We are taxed to pay the interest on the bonds, but this same interest flows right back to the people, since they are the owners of the bonds, and is thus returned to the channels of trade.

"The steel industry should cooperate with all others to secure an equitable and orderly adjustment of the prices of all commodities and services. We have already done much to prevent unreasonable advances during the period of post-war scarcity, and we must continue to do our best to exert a steadying influence on the general situation. We should reduce our own prices if and when other reductions and costs permit, but indiscriminate price cutting would be harmful in a situation which warrants steadfast confidence in the industrial future.

"The steel business, because of its basic character, has a powerful influence on general industry. That influence should be exerted toward stability, especially at this time, when widespread readjustments are necessary.

"It is highly desirable, also, that our steel industry should cooperate with manufacturers in other countries. I know that many foreign manufacturers will gladly participate in further international meetings, and I believe that much good will result from such conferences.

"Labor conditions in the steel industry are in the main satisfactory. The fact cannot be too often emphasized that mutual confidence and cordial cooperation between employe and employer will assure the best results for both."

THE SPIRIT OF STAFF TRAINING

The "Harvester World," official publication of the International Harvester Company, contains an article in its July issue written by Mr. Herbert N. Casson, well known to many of our members, and editor of the "Efficiency Magazine" of London. The caption of the article, "The Spirit of Staff Training," is a term used in England to cover studies in those things that make for greater cooperation and efficiency in English industrial organizations, and as the editor of the "Harvester World" points out, "What Mr. Casson urges for England is already at work in America in the plants of the International Harvester Company," and in fact, in many of the other companies having membership in the Association. We reproduce Mr. Casson's article in full as it contains much information and discussion which will be appreciated by all BULLETIN readers:

The greatest value of Staff Training to a firm is that it creates a company feeling—a spirit of cooperation and service.

The fact is that most firms are full of snobbery and departmentalism.

Every manager, more or less, considers himself superior to all the others.

The workers, for all manner of silly reasons, look down on each other.

Every man is trying to make it appear that he is more important than the other man; and as for the board of directors—it is a House of Lords.

The board of directors is a place of privacy and dignity and holiness and aristocracy and dense ignorance, usually.

It strikes the keynote of "class," and the whole firm is spoiled by it.

If only directors would mingle with the managers and walk about among the workers—if only they would act like men and not like stage Napoleons, half of our industrial problems would disappear.

So here is where the value of Staff Training comes in.

In a Staff Circle, as we call it, the directors and managers and foremen and salesmen are all together in one class.

They are all together as learners, not as swankers. The class feeling is abolished. The departmentalism is broken down. The mutual dislike is changed into mutual respect and good will.

After a Staff Circle has been running for several months the little jealousies and frictions disappear; and there is a general desire to learn and to be helpful to each other.

There is a vast difference, don't forget, between Staff Training and the ordinary university training.

Staff training is not culture. It does not pretend to be. It gives a man an edge, not a polish.

It prepares him for work rather than for leisure. It makes him useful, not ornamental. It develops him into a full-fledged human being, not into a piece of bric-a-brac.

It puts him in touch with the other members of his firm. That is where it differs from the old-fashioned classical education, which put a man out of touch with everybody except his own set.

Recently Oxford University started a correspondence course for the sale of its culture at the rate of twelve to fifteen guineas per course.

I wrote for particulars and received a booklet entitled "Oxford Education." This booklet announces that the purpose of the correspondence course is "to offer to every English-speaking man or woman a part in the great inheritance of Oxford—a place in her intellectual aristocracy.

"Aristocracy!" There, you see, is the keynote of Oxford. It is the exact opposite to the new education, of which the keynote is service.

At the end of this booklet there is the following amazing quotation:

"Nothing is sweeter than to occupy the calm sanctuaries of the wise—the heights well girt about with learning, whence you can look down on other men and see them wandering this way and that, seeking the path of life."

This savage sentence, written by a pagan Roman, 2,000 years ago, is actually held up to us as the ideal of education.

To enable us to "look down on other men!" Ye gods! As if "looking down on other men" were not the one eternal folly and sin of the human race that we are now trying to abolish!

No—we don't want to look down on other men. We don't want to put a few thousand super-men on top of the heights of culture, to look down on 45,000,000 of us, toiling away in the fields and shops and factories.

We don't think that true education will cause a man to scorn all the millwrights and weavers and tanners and shoemakers and bakers and shop assistants and foremen and coal miners and other useful fellow-beings.

No—we have had enough of this pagan rubbish, miscalled culture. We have tried it and it has failed. Now we are going to try something else.

If I have to go back 2,000 years for my inspiration and my ideals, I would not go back to the Romans. I would go back to a wiser Teacher than any Roman—to One who said—"And he that is greatest among you, let him be servant of all."

In our Staff Training I believe that we have found the long-lost spirit of the early Christian fellowship. I believe that we are not only teaching people to be efficient, but to be righthearated as well.

In our staff circles we are showing men and women how to succeed; but far above and beyond that we are showing them that there can be no real success without character and social service and the love of our fellowmen.

NEWSY NOTES

Over five thousand meals are served daily in the company restaurants maintained by the Eastman Kodak Company.

The Elliott-Fisher Company has worked out an extensive organization for the training of the salesmen of the company. Schools are held in different sections of the United States where the instruction is given.

The Steel Works Club of the Joliet plant of the Illinois Steel Company has established a child welfare station in connection with the works. The essentials of a child welfare station are: a doctor, a nurse, mothers and their children and a place in which to meet. The steel works welfare station is open every Tuesday afternoon from one until five o'clock. Infants and children up to six years of age are urged to attend with their mothers. Children needing medical services are referred to their family physician for care. Mothers are given advice and helpful information in keeping their children healthy.

The Joliet Works of the Illinois Steel Company, through the Works Club, conducts swimming lessons open to all employes and members of their families. Special attention is given to women and children.

The National Cash Register Company specializes in noon hour entertainment.

The Mountain States Telephone and Telegraph Company re-

cently staged a contest in its Denver Office. The contest was conducted in connection with the Training Department. Prizes were offered to employees who could bring in the greatest number of accepted applications on the part of new employees. The plan proved successful and will be tried out in offices of the company in other cities.

The company publication of the Berger Manufacturing Company contained the following statement: "It is surprising to note the number of Berger-Stark employees who are attending the night classes at McKinley High School this year."

The Robert H. Ingersoll & Brother Company follows the plan of having the executives address the employees through the training department. This plan insures not only correct information, but also keeps up the personal equation which has such practical value.

The Washburn-Crosby Company finds that the bulletin board method of keeping employees informed has proved very satisfactory.

The Prudential Insurance Company of America is specializing on noon hour entertainments. The assembly hall is used, and some instruction is included with the amusements and entertainments featured.

About one hundred employees of the Winchester Repeating Arms Company are enrolled in their Americanization class.

The Americanization work of the Schenectady Works of the General Electric Company requires sixty classes and a large corps of teachers. Since this activity was undertaken about one year ago, about one hundred and fifty aliens have received their final papers, and some eight hundred additional have made their declaration of intention by taking out their first papers. The classes are able to maintain an average attendance of 73 per cent.

In the period of a little more than a year since the dental clinic was begun by the General Electric Company at its Schenec-

tady Works, 2,538 employes have had their teeth examined. The improvement in the health of the employes has been marked.

Mr. S. J. Booth has been added to the training department of the Travelers Insurance Company as an instructor. This gives the home office school for special agents, cashiers, underwriters, and group department service men a full time faculty of five instructors.

The Chase National Bank reports a registration at the New York chapter of the American Institute of Banking of 1,317. The enrollment of the institution is very large, and has an increase over last year of over two hundred and fifty.

The Shepard Electric Crane & Hoist Company conducts a class in hygiene and health for the wives of employes, but attendance is not limited to this particular class. Plans are also being made to take care of the children. The value of health is gaining unusual recognition.

The Bridgeport Brass Company has completed a survey of its employes for the purpose of forming classes to undertake Americanization instruction. This activity will be installed first in the Bridgeport plant, and will be followed in all of the other plants of the company. This company also encourages its employes to take advantage of the evening schools in the cities where its plants are located.

The Graton & Knight Company has joined with many others in giving sick and death benefits to worthy employes. This activity is handled through organizations managed by the employes themselves. Death benefits have been increased from \$100.00 to \$150.00, and sick benefits accordingly. This company has also instituted Americanization classes, the purpose being to make American citizens of its alien employes.

The New England Telegraph & Telephone Company has opened an evening class at Worcester, Mass., for the instruction of employes. The first class was held on October 6th with the attendance of thirty-two men. The courses at present are technical in character.

INDUSTRY AWARDS UNIVERSITY SCHOLARSHIPS

Four of the Business Organizations Having Membership in the Association Are Now Granting Scholarships in Universities to Certain of Their Worthy Employees. The Westinghouse Electric & Manufacturing Co., The Pennsylvania Railroad Co., Henry L. Doherty & Co., and the Graton & Knight Manufacturing Co. Are the Pioneers in This Movement. It Is Just Another Development Intended to Give Mutual Advantage and to Result in Better Understanding and More Complete Cooperation. The Plans Under Which These Scholarships Are Awarded Are Here Given in Detail.

Every year approximately one million fourteen-year-old children leave school, large numbers of them having advanced no further than the fifth and sixth grades. None of these children have ever set foot in a high school, nor will more than an infinitesimal percentage of them make up in after years an opportunity thus missed. The loss to the state and the handicap to the prosperity and progress of the country inherent in this state of affairs is beyond calculation.

Moreover, there is a minor tragedy underlying this debarring of so high a proportion of our future citizens from the educational and cultural advantages that should be open to every child of the nation in the fact that so many of our boys and girls are completely awake to the value of that of which they are being deprived. Nor is there any hope in the case of the majority of those who appreciate what further mental training might do for them—of attaining such training by their own unaided efforts. "Working one's way" through high school or college is not always a matter of mere volition. Health, family dependence, the possession of the sort of usefulness demanded for service in educational institutions have all to be considered in reckoning the chances of getting an education by paying as you go.

Industry is wide awake to the economic problem presented by the untrained boy and girl workers and the necessity, through intensive training, of offsetting the evils of indiscriminate dumping into it of such an army of unskilled labor. But while the firms that are offering technical training to the youths that gravitate into their ranks of employees may be counted by the hundreds today, the number is appreciably smaller which is mak-

ing systematic attempts to improve the general intellectual condition of their employes, and more especially to develop the unusual powers of the many individuals who, having been forced into industry too early in life, thus lost the opportunity to fit themselves for higher usefulness than that they have been compelled by untoward circumstances to fill.

The educational opportunities offered to employes customarily take the form of lectures, classes, libraries and reading rooms, more or less narrowly confined in subject to the company's business; but a number of employers have gone a step further. For example, many companies have provided instruction in English for their foreign-born employes; a number of firms maintain classes in modern languages, history, elocution, geography and similar subjects, while not a few provide domestic science classes—cooking, sewing, embroidery and millinery—for the women in their employ.

Nor should we overlook in this connection the numberless company dramatic and choral societies, literary clubs, orchestras and bands, since, as has been frequently pointed out, they not only develop the aesthetic taste of the individual, but the cultural value of studying and producing good music, drama and literature affects not only those who participate, but also those who compose the audience.

Then many companies make special provision for their ambitious employes who prefer outside training. One company maintains, with the cooperation of the local school board, a technical night school for the benefit of its workers. A moderate tuition fee is charged, the high school building is used, and the costs above the tuition paid by students is met by the company and the school district, the former paying about three-fourths of the deficit. A number of other companies refund to their student workers the cost in whole or in part of advanced training in selected schools.

But the most ambitious phase of employe training along educational and cultural lines are the scholarships awarded by a number of companies.

War Memorial Scholarships of the Westinghouse Company

An especially generous and well worked out scholarship award has been established by the Westinghouse Electric & Manufacturing Company. Four scholarships are awarded annually by this company as a memorial to those employes of the company and its subsidiary companies who entered the service of the country during the world war.

Each scholarship carries with it an annual payment of five hundred dollars for a period not to exceed four years, such payment to be applied toward an engineering education in any technical school or college that the successful candidate may select with the approval of the committee. The scholarships are granted for one year only, but will be continued for the full course, provided the scholar maintains the academic and other standards required by the college or institution in which he elects to pursue his course of study.

These scholarships are allotted by means of competitive examinations to (a) Sons of employes of the company and its subsidiary companies who have been employed five years or more. (b) Employes of the company and its subsidiary companies who have been continuously employed for at least two years and who have not, on September 1st, attained the age of twenty-four. Not more than two of these scholarships may be awarded annually.

The rules governing the award follow:

1. Application is made on blanks supplied by the Educational Department, through its representative located at the works or office from which the candidate applies.
2. The applicant, in due course, is notified as to whether his application is in proper form and he is eligible to compete for the scholarship.
3. Those applicants who qualify to compete for the scholarship are notified by the War Memorial Scholarship representative, as to time and place to appear for competitive examination.
4. All candidates are required to submit to a written and an oral examination, the nature of which is determined by the War Memorial Scholarship Committee.
5. The written examination is held at such time and place as may be determined by the Committee, notification being given each applicant. It is intended that this examination be held at the works or office from which the candidate applies, under the supervision of the representative of the Educational Department.
6. The written examination is intended to disclose the candidate's familiarity with the subjects usually required for college entrance.
7. The oral examination is planned to determine the general qualifications of the applicant, for the scholarship. It is held after the written examination, and is individual, the

time and place being given by a representative of the Educational Department.

8. The examination papers and the results of the oral examination are submitted to the War Memorial Scholarship Committee, who select the four candidates who, in their judgment, have most successfully passed the test.

In announcing this plan for scholarships, the company announced its intention to continue them from year to year, but reserves the right to discontinue the plan entirely at any time it may seem wise or expedient to do so.

The plan is administered by a committee of three vice-presidents of the company, and executed by the educational department.

A War Memorial Scholarship representative is appointed in every district office and subsidiary company and acts as an agent for the educational department in advertising the scholarships, in receiving applications, and in conducting examinations. The examinations are prepared, however, at the educational department in East Pittsburgh, and sent to the various representatives under seal. On the date of the examination, as advertised beforehand, the representative breaks the seal on the examination questions in the presence of the applicants, and conducts the examination according to rules laid down by the educational department. The object of this rule is to secure absolute uniformity.

When the written examination is completed the papers are forwarded to the educational department at East Pittsburgh at once with no real identification mark except the number which is assigned to the applicant by the representative at the start of the examination. When the papers are all received at East Pittsburgh, they are carefully graded, problem by problem, and the comparative rating established by the total number of counts each applicant has made, each problem in the examination having an assigned value. The papers are then placed in the descending order in relation to their merit.

The papers are then turned over to the War Memorial Scholarship Committee together with the applications, photographs, and personal information in regard to the various applicants. A key to the numbers appearing on the examination papers is also furnished to the committee at this time in order that they may proceed to identify the various examination papers and compare them with the applications of the various individuals, and other information furnished therewith. On the basis of

the information then at hand, both from the examination and aside from it, the scholarship committee makes the awards.

After the awards are made the four successful candidates are notified by the chairman of the committee. This notice generally takes the form of a personal letter, in which their attention is called to the motive which inspired the company to establish War Memorial Scholarships.

When the scholarship is awarded it carries with it the sum of \$500.00 a year for four years without further examination, provided the scholar maintain the academic and other requirements of the school he has selected.

A list of the men awarded scholarships, and the schools they are attending are as follows:

<i>Name</i>	<i>Year</i>	<i>School</i>
Paul O. Langguth	1919	University of Pittsburgh
Andrew P. Lesniak	1919	University of Pittsburgh
Arthur S. Marthens	1919	Carnegie Inst. of Technology
Herbert S. Pahren	1919	University of Cincinnati
Alva C. Corrao	1920	Carnegie Inst. of Technology
Herbert R. Hillman	1920	Carnegie Inst. of Technology
J. Dale Seabert	1920	Carnegie Inst. of Technology
Henry G. Symonds	1920	Leland Stanford, Jr., University

By awarding four scholarships a year the company will have, after three years, sixteen men attending the various engineering schools throughout the United States, according to their selection with the approval of the War Memorial Scholarship Committee.

The Pennsylvania Railroad Company

On a somewhat similar basis of merit, the Pennsylvania Railroad Company also makes a scholarship award. The company has established a war memorial in the form of an annual scholarship, open to competition by both men and women, which entitles the recipient to pursue any course at the University of Pennsylvania. The first scholarship was won by Miss Dorothy E. Holloway, of Williamsport, Pa. The purpose of the scholarship is to commemorate the work done during the world war by the members of Department No. 3 in making surgical dressings for the American troops, and also as a memorial to the men of the freight traffic department of the Pennsylvania Railroad who lost their lives in the conflict. The competition is open to sons and daughters of present or deceased employes of the freight traffic department of the Pennsylvania system and to the sons and daughters of members of Department No. 3.

The Pennsylvania system also offers its employes an opportunity to compete for eight other scholarships, known as the Frank Thomson Scholarships, maintained by a trust fund, established in 1915 by the children of the late Frank Thomson, formerly president of the Pennsylvania Railroad Company, in memory of their father. The income from this fund is used to give the sons of living and deceased employes of the lines of the Pennsylvania system east and west of Pittsburgh an opportunity to secure a technical education, to qualify them for employment by the Pennsylvania system.

The terms of the trust provide for eight scholarships covering a period of four years each. The university, college, or technical school selected by the candidate being subject to approval by the Railroad Company. The scholarships are awarded to two students in successive four year terms.

Competitive examinations, open to sons of employes of all the lines of the Pennsylvania system east and west of Pittsburgh, including the Cumberland Valley Railroad, Long Island Railroad, New York, Philadelphia & Norfolk Railroad, Baltimore, Chesapeake & Atlantic Railway, Maryland, Delaware & Virginia Railway, Erie & Western Transportation Company; Grand Rapids & Indiana Railway; Louisville Bridge & Terminal Railway; Cincinnati, Lebanon & Northern Railway; Wheeling Terminal Railway; Waynesburg & Washington Railroad, and Ohio River & Western Railroad, were held in June, 1919, for the two 1919-1920 scholarships. These examinations embraced subjects corresponding, in general, to the entrance requirements of the scientific departments of the higher class universities, colleges and technical schools.

Particular attention is directed to the fact that while applicants already in college are not precluded from competing for the scholarships, the primal intention of the donors in establishing the trust fund for the maintenance of the Frank Thomson Scholarships is to give to worthy sons of employes an opportunity to secure a technical education and better fit themselves for service with the Pennsylvania System, which opportunity they would not otherwise have. Applications from students already in college are given the consideration they merit, keeping in mind the intention of the donors of the trust fund. Such applicants in order to secure consideration, must obtain a mark of at least 50 per cent in all the branches in which they are examined.

The successful candidates receive an appropriate certificate from the company entitling them to payment by the trustee (The Fidelity Trust Company of Philadelphia), for each year

during which they attend the university, college or technical school chosen, of a sum not to exceed six hundred dollars in equal quarterly payments.

The College Entrance Examination Board of New York City acted as the agent of the railroad company in conducting the examinations for the year 1919-1920. Information regarding rules, regulations and requirements are furnished to candidates desiring to enter the competitive examination, upon application in writing to the College Entrance Board, 431 West 117th Street, New York, N. Y.

Henry L. Doherty & Company

Henry L. Doherty and Frank W. Frueauff, constituting the firm of Henry L. Doherty & Company, have created a securities fund, the income from which is to be applied to maintaining scholarships for the sons of Doherty employes receiving salaries of \$200 a month or less. The intention of the firm members is to afford many Doherty "Juniors" an opportunity for a technical education by assisting them through college. After graduation it is planned to put them in the Doherty Training Schools, and so prepare them to carry on the work of the organization. The intention is to have the men nominated by or through the general managers of properties who furnish all the details and give reasons why the young men should be considered for the scholarships. There is a definite condition that the scholar should be the son of an employer who receives \$200.00 per month or less; and there is an implied condition that the father should be a loyal employe in good standing after some years of service. There is no fixed sum provided, but a budget of expenses is prepared to which the scholar afterward adheres. The direction of the scholar and the financing of his training is undertaken by the general manager or some one appointed to supervise the work of the scholar.

Each scholar is also expected to keep in "good and regular standing" in college, and generally to get the greatest benefit from the educational opportunities afforded by Mr. Doherty and Mr. Frueauff.

The manager of the "property" in which the father is employed makes a recommendation for scholarship appointments, and is expected to keep in touch with the scholar's progress and advise him and finance him in accordance with his budget, being later reimbursed from the scholarship fund. Upon graduation the scholar will be given an opportunity to enter the Doherty

Training Schools and develop into a useful and effective member of the Doherty organization.

Graton & Knight Company

Each year a boy selected by competition from Graton & Knight families has his expenses paid through college by the Graton & Knight Company. This arrangement includes tuition, laboratory expenses, and gymnasium fee. The boy who wins the scholarship gets something that in dollars and cents alone is worth \$220.00 a year; almost a thousand dollars in the four years. Any boy who is qualified may enter the competition.

NEW BOOKS WHICH MAY INTEREST OUR READERS

The development of the personnel division of management in industrial and commercial organizations has reached the stage where a considerable number of text books are being prepared in which progress of the different divisions of the development are described, and in some of these text books the trend of future developments are predicted. Some of the problems of the personnel division of management of business organizations are sufficiently general in character so that it is not difficult to supply the text book demand; for example, "Efficient Business Correspondence," "Effective Speech," "The Applications of Psychology to Business Problems."

Other problems in personnel, however, are more restricted in scope and therefore more difficult to serve from the standpoint of the text book requirements. It is possible that in the not distant future Americanization and the training of unskilled workers can be so standardized as to admit of text book instruction. The development of Trade Apprenticeship courses may also in the near future reach a stage where text books can be prepared. Office work training also is approaching a stage where standards may be agreed upon and the instruction could be reduced to text book form.

At the present time practically all text books designed to meet instruction needs are prepared from the viewpoint of the needs of academic or engineering instruction. Some of the publishers of text books, however, are now making investigation with a view to determining the range of the needs of corporation schools. These investigations will undoubtedly at a later period result in text books prepared to meet corporation school needs.

Human Efficiency and Levels of Intelligence.—By Henry

Herbert Goddard, Director of the Bureau of Juvenile Research of the State of Ohio. Published by Princeton University Press, Princeton, N. J. Price, \$1.50 net. Mr. Goddard was a pioneer in the field of applying psychology to the individual with a view to determining tests that would show degrees of intelligence. In this book he offers solutions for the old problem of fitting each person into his proper place in the world; first, by determining degrees of individual intelligence, and secondly, by determining other variables which enter into the requirements of positions in the business world. The book is intensely interesting. It also deals with the psychological tests made to determine the relative intelligence of one million seven hundred thousand men in the Army branch of military service during the recent world war.

The application of psychology to the individual as a method of determining intelligence is fast becoming an exact science. Business organizations are constantly seeking methods to insure greater operating efficiency. The problem seems only to await the human engineer who will undertake the work. This book is a splendid contribution to the subject and should be in the library of all business organizations.

Schooling of the Emigrant.—By Frank V. Thompson, Superintendent of Public Schools, Boston, Mass. Published by Harper & Brothers, New York, N. Y. Price, \$2 net. This book is one of a series of eleven which will be produced dealing with the subject of Americanization studies. The aim of the series is to establish a common viewpoint essentially political, industrial, etc., between the native and emigrant populations in the interest of national unity. There has been a popular fervor in connection with turning the alien employe in America into a citizen through the method of education. Real progress in this movement to date has been made by the large industrial organizations which employ considerable numbers of aliens. To any business organization which has the Americanization problem, this book will prove a valuable aid in solving the problem.

The Fundamentals of Speech.—By Charles Henry Woolbert, Assistant Professor of Speech, University of Illinois. Published by Harper & Brothers, New York, N. Y. Price, \$2.25 net. The book treats of:

1. The Nature of Speech and Speech Training.
2. The Analysis of Thought and Meaning.
3. The Relation of the Body to Speech.
4. The Voice and the Mechanism of Expression.

5. A Study of Criticism and Drill as Aids to Finding and Carrying the Meaning.
6. The Relation of the Public Speaker to his Audience; the Aesthetics, Ethics, Sociology of Public Address.

It is a valuable contribution to the art of effective speech. The place that speech plays in modern business life is just beginning to gain recognition. The essential thesis of the book is that no speaking is good speaking which is not of the whole personality, and which does not establish the desired relationship between the one speaking and the one listening. The principles taught are as readily adaptable to individual conversation as to public addresses.

Principles of Labor Legislation.—By John R. Commons, Professor of Political Economy, University of Wisconsin, and John B. Andrews, Secretary of the American Association for Labor Legislation. Published by Harper & Brothers, New York, N. Y. Price, \$2.75 net. This book is one of several now making their appearance and which seek to define the so-called capital and labor problems, trace legislation dealing with these problems, and where possible point remedies which may be utilized in the further development of the movement.

The subject of Labor Legislation is summarized and formulated in concise form in this book. It treats of the developments of the last five years of the legislation granting Workmen's Compensation for industrial accidents, Minimum Wage Laws, and other protective regulations far-reaching in their possibilities to those charged with management of business organizations. The book brings the history of Labor Legislation up to May, 1920.

Handbook of Business English.—By Hotchkiss and Kilduff. Published by Harper & Brothers (Revised Edition), New York, N. Y. Price, \$1.30 net. An excellent book for ready reference on the part of those who handle business correspondence.

El Principe que Todo lo Apprendio en los Libros.—By Jacinto Benavente. Edited with notes, exercises and vocabulary by Aurelio M. Espinosa, of Stanford University. Cloth. xii—74 pages. Price, 80 cents. Published by World Book Company, Yonkers-on-Hudson, New York.

La Muela del Rey Farfan.—By S. and J. Alvarez Quintero. Edited with notes, exercises for conversation, and vocabulary, by Aurelio M. Espinosa. Cloth. xii—93 pages. Price, 80 cents. Published by World Book Company, Yonkers-on-Hudson, New York.

The Frontier of Control, A Study of British Workshop

Politics, by Carter L. Goodrich. Published by Harcourt, Brace & Howe, New York, N. Y. Price, \$2.50 net. There is a theory current that the employer does and should exercise "complete executive control" over industry. There are other theories current that the organized workers should sooner or later, and more or less completely, take over "the control of industry." This book attempts to record the present stage of conflict between these two ideals, and to determine precisely what control the workers of Great Britain actually exercise on discipline and management in industry today. For those who are interested in management problems—for after all the control of labor is a management problem—this book will be found most interesting.

New York Chapter

The New York Local Chapter is carrying on an active program which includes inspection trips to many plants and other places of interest in and about New York. On December 1st the subject of the Round Table conference was salaries. The meeting was held in the Apprentices' Room of the Seamens Church Institute. The conference was led by Lawrence Washington of the Metropolitan Life Insurance Company. It came out during the discussion that the factors to be considered in determining salaries are the job, the length of service, and the excellence of the work done. The discussion also covered Job Analysis and Psychological tests and other rating scales.

On December 15th the Chapter met in the trial room of Police Headquarters, New York City, the Police Department of New York City being a Class "A" member of the Association. After an address by Police Commissioner Enright, an inspection was made of the Medical Examination Room, under the direction of Dr. Daniel Donovan, Chief Surgeon of the Police Department, and the class rooms of the Training School, under the direction of Lieutenant Charles Scofield.

Those attending the meeting were also given an opportunity to see in the gymnasium the work of the Training School in the field of calisthenics, the principles of self-defence and the manual of arms, a class of recruits recently graduated being recalled to the school for this purpose.

At the conclusion of the inspection trip Deputy Commissioner Joseph A. Faurot, in charge of the Bureau of Criminal Identification, finger printed each member of the party, these finger prints being returned to each member as a souvenir of the visit after they had been properly classified.

PIERCE-ARROW MOTOR CAR COMPANY INSTITUTES A "PLANNING STAFF"

Walter M. Ladd, Who Is in Charge of the "Staff," Makes Clear Just How the New Function of Management Will Fit Into the Other Sub-Divisions of the Other Company Activities—The "Staff" Will Proceed on the Theory That Those Composing the Management of the Company Are so Completely Occupied with Their Duties That There Is Not Sufficient Time for Proper Planning and Organizing.

The Pierce-Arrow Motor Car Company has developed a planning staff in connection with its production department. The following account of the purposes and functions of the "Staff" will be of interest to BULLETIN readers:

From *The Arrow*, a Company publication.

In trying to make clear the meaning of the word "Staff," we must first understand how the duties of management are divided. The word "Management," strictly speaking, refers to the directing heads of a concern and in the case of Pierce-Arrow includes the officers and chief executives of the company. Briefly speaking, the duties of management are divided into two kinds:

First—the doing or executive function wherein they instruct their subordinate executives as to just what they desire to have accomplished.

Second—The thinking or planning function wherein they study to determine the best ways to accomplish things and lay definite plans for their accomplishment.

If we watch our executives at their work, it becomes evident to us that in an organization of this size, due to the tremendous pressure of work, the doing or executive function takes so much time and thought, that there is little left for them to spend in the second function of planning and organizing. It is also true, that while in a great organization such as ours, the responsibility of the management in directing work of the plant is extremely difficult; at the same time, there is all the more necessity for a smooth, well-balanced organization and careful planning.

We all know now that the reason why the Germans were so successful in the early stages of the war was due to their wonderful organization, thorough planning and the closely knit and well-balanced relations of their various government departments and armies. This was what was termed "Their Staff Work." It was only after the Allies had built up a strong, centralized organi-

zation, under one supreme head, with the coordination so badly lacking in the early stages of the war that the Germans were finally beaten.

Again, have you ever stopped to think that in our Pierce-Arrow factory, with its thousands of men, we are in reality a small city, only that we must be working almost as a single man in order to turn out daily a definite number of Pierce-Arrow vehicles of the highest possible quality. This work requires a much more effective plan of government than the average city, with its councils and its various bureaus. This is the sort of a job with which the management has to wrestle. It has therefore become necessary to establish an agency to the management to assist in the planning and organization work, which in our case is termed the "Planning Staff."

Planning Staff's Duties

In this brief article, it is impossible to explain in detail all the staff is doing or plans to do. We can, however, mention a few of the activities with which many of the Pierce-Arrow men and women are already familiar.

Organization Studies

One of the most important jobs of the Planning Staff is to make studies of the various departments and grouping of departments in order to obtain the balance which produces the best possible results. So far as possible, it is the desire of the management to develop an organization based on the best ideas of the men in various departments, who are responsible for carrying on of work of the department concerned. In this way, an organization representing, so far as possible, the ideas of all, will be developed.

In addition, we also obtain the very best ideas of other large companies. Investigations of industrial organization, as they exist in other companies, are made with the purpose of suggesting those elements which seem best adaptable to our own organization. These studies involve the duties of different departments in their relation to every other department with which they come in contact, and also the duties of individuals. With this information, the Staff is in a position to advise the management as to the best possible methods applicable to our conditions.

Division or Department Team Work

This is what in organization is called "Coordination." In

a small plant, such as ours was a few years ago, it is comparatively easy for the general manager to secure smoothness of operation and keep the various departments in touch with what others are doing by having frequent conferences and by personal consultation with the different executives. In a plant such as ours is now, however, it is absolutely impossible for the small management group to keep in touch with all departments, their methods and system, and keep them running smoothly in relation to each other. The demands are too great to accomplish unassisted this necessary team work and smoothness of operation.

The Planning Staff is created to assist the management in this work. Not having any responsibility in the actual production of cars and trucks, the Staff is in an excellent position to study the methods existing in all departments, to straighten out difficulties and help to establish smoothness in methods and procedure.

Charting

Another of the important jobs of the Planning Staff has been to show the relations of the various functions of divisions, departments and sections in the form of organization charts. And further, to write into many of these charts, the various duties and responsibilities involved in that particular part of the organization.

Procedures

Along with the charting of the organization has gone a development of standardized procedures. The writing of procedures applies to all kinds of efforts in the organization except the writing of mechanical processes as published on operation sheets. The Planning Staff has recently issued a sheet explaining the use of procedures, an extract of which follows:

Object of Procedures

1. To standardize administrative ways and means of getting things done.
2. To outline and establish the best, easiest and quickest ways of cutting out unnecessary red tape and duplications of effort.
3. To assist executives in teaching assistants and other help definitely and quickly what to do to get certain desired results.
4. To enable executives to readily determine the scope of the work of their department and its relationship to other departments.

Organization Work

1. The study, investigation and analysis of organization prob-

lems, groupings, duty of personnel, procedures, etc., with their application to the work of the P. A. M. C. Co.

2. The study, investigation and analysis of the P. A. M. C. Co. organization, responsibilities and procedures.
3. The charting of the approved organization of this company, and the distribution and maintenance of all Organization Charts.
4. The preparation of detailed responsibilities of Fundamental Groups, Divisions, Departments, Sections and Personnel; and the issue of same.

Procedures

1. The preparation of standardized Procedures; their approval, issue and maintenance.
2. The inspection of Procedures.

Administrative Orders

1. Receives and clears all Administrative Orders.
2. Keeps Administrative Orders up-to-date.

Organization Interpretations

1. The interpretation of Organization Charts as they relate to the authority and responsibilities of Fundamental Groups, Divisions, Departments, Executives and other personnel.
2. The interpretation of methods and procedures as defined by management policy or decisions.

Conference Work

1. The initiation (if desired) and calling of major conferences to secure coordination or obtain management decisions.
2. The scheduling of regular major conferences.
3. The Charting of all standing conferences or committees with the outline of their procedure and responsibilities.
4. Attends all major conferences or committees where changes in management policy or decisions are involved.

Staff Assistance to the Management

1. Makes investigation and reports as directed.
2. Follows up the execution of important orders.
3. Entertainment of special visitors to the plant.
4. The development of Administrative plans and schedules as directed.

Special New Work

1. The analysis and initiation of new procedures or organizations to meet the needs of the Company.
2. Recommends outside staff experts to assist in the solution of special problems.
3. Cooperates with specialists brought in to help solve special problems.

As will be seen from the foregoing, the Planning Staff, because of its responsibilities, will have at hand (and increasing as time goes on) information of value when questions of procedure, forms, responsibilities, transfer of personnel, appointment of executives, coordination of activities, etc., comes up.

Mrs. J. Ogden Armour Promotes Physical Welfare of Armour & Company Girl Employees

Mrs. J. Ogden Armour is and for many years has been much interested in the welfare of the girls employed by Armour & Company. Winter classes are conducted for the Chicago general office force, and in connection with the classes there is a gymnasium. Monday and Friday nights the gymnasium is given over to them exclusively and from their use of it have evolved a basketball team, a swimming team and a dancing class.

Awards of cups and medals have been determined upon to reward the most meritorious activities of teams and individuals of these winter classes. Mrs. Armour will present a cup as she did last year to the champion swimming team. She also will give a cup for the basketball team which comes through the season with the most victories to its credit.

Mrs. Armour plans also to give a medal to the individual member of the gymnasium classes who shows the most all around development. By that is meant not only physical improvement, but a mental and spiritual attitude as well—good sportsmanship, health and womanliness. The medal will be awarded on the recommendation of a committee to be chosen from the office management, the gymnasium management and the members of the woman's personal service department, and for that medal every one can compete, no matter whether they are dancers, basketball players or swimmers.

The Du Pont Company Gives Training Course for Industrial Fire Chiefs

The following account is taken from a company publication:

Fire Chiefs from all of the Eastern Du Pont Plants assembled at Arlington on Monday, October 25. The occasion was the opening of the "Du Pont Training Course for Industrial Fire Chiefs," which is the first course of this kind ever started in this country.

The opening address was made by Mr. Wiggins, manager of

the Arlington Works. Mr. Wiggins welcomed the fire fighters to Arlington and presented them with the key to the plant and commanded them to make themselves at home. He also touched briefly upon the need of such a course and the good results which could be obtained from it.

Mr. H. L. Miner, manager of the Fire Protection Department of Wilmington, under whose direction the course is being given, then briefly outlined the nature of the work which would be taken up during the course, and followed this with an illustrated talk upon "What a Fire Chief should know About His Plant."

The meeting was then turned into an open forum, and short talks were made by Fire Chief Greenfield of Arlington, Chief Millard Fillmore Tyson, who, before coming with the company, was for years Fire Chief of the City of Louisville, Ky., and is probably one of the best known fire fighters in the country today; Chief Frank J. O'Connor, of Deepwater; Mr. Brokaw, assistant manager of the Arlington Plant, and others.

Increased Interest in Training

It is gratifying to note optimistic statements about training activities in company publications which come to the Editor's desk. The following, from the house organ of the Pratt & Whitney Company, is typical of many.

Mr. Fowler says, "the class is the best he ever had anywhere." All along the line there is noted statements similar in character. Employes as well as employers are coming to appreciate the value of training.

President Reed of the Mountain States Telephone & Telegraph Company Inaugurates a Conference Plan

President Ben S. Reed, of the Mountain States Telephone & Telegraph Company, has inaugurated a plan which calls for an annual conference of all of those who are charged with executive and administrative duties in the company. The first conference was held in Denver in October.

The conference was participated in by approximately ninety men representing all departments in all the operating divisions as well as in the general offices.

A program, which included many speakers, was given and practically every phase of the company activities were discussed. The conference lasted two days, and in giving an account of it the company publication states:

"The value of the conference, of course, cannot be measured at this time. It will depend upon observation during the coming year as to improvements in the way of economic and efficient administration and in the quality of the service rendered."

NEW MEMBERS

Since the last statement appearing in the BULLETIN the following new members have been received:

Class "A"

Erie Railroad Company, 50 Church Street, New York, N. Y.,
Mr. A. B. Hoff.

Class "B"

G. H. Barber, Winchester Repeating Arms Company, New Haven, Conn.

A. J. Hayes, Winchester Repeating Arms Company, New Haven, Conn.

J. W. Russel, Winchester Repeating Arms Co., New Haven, Conn.

R. H. Spahr, Winchester Repeating Arms Company, New Haven, Conn.

Class "C"

Charles C. Wood, 1926 Fifth Avenue, Troy, N. Y.

Joseph A. Meagher, Industrial Relations Association of Wheeling District, Wheeling, W. Va.

H. A. Shuder, State Secretary Near East Relief, Fargo, N. Dak.

W. S. Ashby, Business Manager, Bowling Green Business University, Bowling Green, Ky.

Charlotte Whitton, Social Service Council of Canada, 504 Confederation Building, Toronto, Canada.

Christabel Abbott, Normal School, Geneseo, N. Y.

Training Activities of the Shepard Electric Crane & Hoist Company

Over two hundred employes attended the opening session of the corporation school, which the Shepard Electric Crane and Hoist Company maintains for the benefit of its employes. The school was started four years ago, and during the first year offered five courses. From year to year the number of these courses have been increased, until now fifteen courses are offered, covering all important branches of training.

THE EMPLOYEES OF R. H. INGERSOLL & BROTHER FORM THE "ASSOCIATED INVESTORS," Inc.

The San Francisco Organization Has Paid Employees Eight Per Cent and It is Felt that the New York Organization Will Be Able to Do Even Better—Cooperative Buying Makes It Possible to Take Advantage of Opportunities to Purchase High-Grade Securities, and as There Is No Expense in Connection with Conducting the Association Stockholders Receive All of the Profit.

The new association is not organized or financed by the company, but according to the proposed charter and by-laws no one who is not an employe of the company can be a director of the organization. The new plan follows a similar movement which was organized eight years ago in the San Francisco office of the company. The employes, by pooling their earnings and making joint investments, have been able to earn better than six per cent. At the present time the San Francisco office is paying ten per cent annually, and in addition has been able to set aside sufficient surplus so that the shares are now worth more than their original cost. The advantages of such an association are set forth in the *Ingersoll Message*, a company publication.

"In the first place, no matter what we may be earning it is always hard to save—and especially hard to do it voluntarily and without some sort of a prod such as the Liberty Loans and insurance policies. During the war a great many people saved who had never done it before and—if the truth must be known—have not done so since.

"But assuming that you want to save and have the will-power to make yourself save—what are you going to do with the money? Perhaps you will put it in a savings bank and get 3 1/2 per cent or 4 per cent. The money will probably be safe there but 4 per cent is not a very big reward for the self-denial you subject yourself to in making the saving. You may know plenty of other very desirable investments in the form of municipal or public utility bonds but as most of these bonds are not issued in denominations smaller than \$1,000 or \$500, you are not able to take advantage of the attractive offers.

"Or perhaps you have become convinced there is safety of principal and good interest to be had by investing in some company. You put all your money into it—and then something happens that could not have been foretold and you have nothing to show for your weeks and months of saving.

"All of these disappointments are overcome in the proposed

association. Subscriptions may be paid either in cash or on an instalment basis, the minimum payment being \$1.50 a month on each \$100 share of stock. Most of us will take advantage of the installments and thereby will thrust thrift upon ourselves just as we did when we subscribed to Liberty Loans.

"Because we shall have \$50,000 or \$100,000 to invest, we shall be able to take advantage of all the attractive and safe investment offerings that are closed to the small investor because he lacks sufficient capital to swing the deal.

"Safety is assured because the investment of the association will be spread out among a number of offerings and one of the proposed by-laws prevents the investment of more than 25 per cent of the capital and surplus in any one security with the exception of United States Government Bonds.

Object of the Association

The primary object will be to afford a means of pooling our savings for investment purposes. No one individual can invest his own limited capital to as great an advantage and at as high an average of safety as can be obtained in the investment of large sums which by their very size can be distributed over a great variety of risks.

The charter will be made as broad as legally possible so as to permit the corporation to engage in mercantile enterprises of all kinds, the ownership of real estate, investment of stocks and bonds, the loaning of money, the borrowing of money on open account, the issuing of promissory notes and bonds, etc. The only limit that we intend to make is that necessary to avoid classification as a bank or trust corporation, subject to the restrictions of the banking laws.

Capital Stock

It is planned to incorporate for 1,000 shares of no par value, 500 to be issued at once if subscribed for, and the balance to remain in the treasury.

Provisions for Safety

In order to anticipate all contingencies and give the highest possible assurance of safety, the following special provisions and restrictions, will, if legally possible, be incorporated in the charter or by-laws.

(a) The absolute control of the corporation and of its entire business shall rest in a Board of Directors, not less than seven in number, who must each of them throughout their entire term of office be stockholders of the corporation, and employees of Robert H. Ingersoll & Brother.

In elections of Directors cumulative voting shall be permitted. Directors' terms of office shall be three years with the first directorate divided into three groups, one for one, one for two and one for three years respectively, and vacancies occurring in the directorate shall be filled by election at special meetings of the stockholders.

(b) Officers and Directors shall serve without compensation except by specific authorization of not less than two-thirds of stock outstanding.

(c) No sales or issues of new stock may be made at less than the actual earned accrued book value per share of stock outstanding, not except with provision of sixty-day option to existing stockholders of record to subscribe to such sale or issue in proportion to their holdings.

(d) The corporation is to be required to devote a fixed proportion of its undistributed surplus to the purchase of shares of its own stock at not more than accrued earned book value when such shares are available for purchase. (This assures you of a quick market for your stock if at any time you should find it necessary to sell.)

(e) No funds belonging to the corporation may be invested or expended, or any liability whatsoever created, by any officer or agent of the corporation except upon specific authorization of majority of all Directors.

(f) No more than 25 per cent of the investment funds shall be or remain invested at one time in one security or investment or one class of securities or investments (excepting the capital stock of the corporation or loans secured thereby, and excepting the bonds or other obligations of the United States Government, or loans secured thereby) unless specifically authorized by not less than two-thirds of the outstanding capital stock.

(g) No access to securities or funds of the corporation shall be permitted except by joint action of not less than two bonded officers.

(h) Expenses of operation (excepting taxes of all kinds, interest on borrowed capital, and such special legal expenses as may be found necessary by two-thirds vote of all Directors) shall not exceed in any year 1 per cent of the monthly average of invested funds during such year unless authorized by two-thirds vote of stock outstanding.

Terms of Your Subscription

The terms of subscription are going to be very easy so that it will be possible for all who wish to practice thrift and to invest

their savings safely and profitably, to take advantage of this plan.

The stock will be issued at a price of \$100 per share (this is the price paid by the pre-organization subscribers).

The minimum subscription will be five shares and the maximum fifty shares. Payment may be made in cash in full at the time of subscription (or on call by the Directors); or by part payment installment plan based upon a first payment of not less than 5 per cent in cash and the balance in monthly installments amounting to not less than \$1.50 per share with interest at the rate of 6 per cent yearly on the balance of principal unpaid.

Dressmaking and Home Making Courses of the General Electric Company

A company publication of the General Electric Company contains an account of the development of a dressmaking course and a home making class which are maintained in the Lynn plant of the company. The account states that a steady interest, and an almost perfect attendance gives evidence of increasing enthusiasm.

The following course has been planned, which may be varied to meet the individual needs and desires of the class:

1. Making of cotton shirtwaist.
2. Making of cotton or wool skirt.
3. Making of one-piece dress of any material.
4. Remodeling of old garments.

Although the instruction is largely individual, there are class demonstrations, and individual problems of general value are brought to the attention of the entire class.

In order that these classes may serve in a larger way, it is planned to publish in each issue of the *Lynn Works News* definite helps and hints derived from class-room instruction; illustrations of models which have been tested and found practicable for use as well as attractive; device to make home dressmaking simpler and easier.

Also, in subsequent issues will appear articles on the following subjects:

1. Freshening up and Remaking Old Garments for Your Family.
2. Something New in Collars, Cuffs and Pockets.
3. Making a Plan for Your Clothing.
4. How to Select Materials.
5. Shopping Hints.

The cooking, dressmaking and millinery classes conducted for

the benefit of the women connected with the company are proving very popular and the members of each class express themselves as delighted with the subjects taught and determined to learn all possible.

About 200 women are now enrolled in the different classes and there is a large waiting list and every indication that the interest shown will probably result in other classes being formed.

In the dressmaking and millinery classes the young women are learning very rapidly. Miss Edna Cobb, the instructor, has had much experience and is pleased at the manner in which interest has been shown by the pupils. In the former class they are being taught how to make different garments, and in the latter how to turn out good looking head gear.

Mrs. Cluston, the cooking expert, is instructing classes that have made fine headway. While a beginning has just been made the young women have entered into the spirit of the plan with great enthusiasm and anxiously await the preparation of a menu with the accompanying instruction on how to prepare food.

Eastman Kodak Company Establishes a Savings and Loan Association

The Eastman Kodak Company has joined the ranks of other industrial organizations which are making a sincere effort to solve the housing problem of the company's employees. The Savings and Loan Association plan adopted by this company follows closely the organization of the New York Edison Savings and Loan Association and other similar organizations. The plan provides for the issuance of three kinds of shares—installment shares, savings shares, and income shares. The association will open for business on January 3, 1921. Advanced subscriptions, however, have been received.

Training Activities of the Southern Telephone Company

The necessity for training is fully recognized by the Southern Bell Telephone & Telegraph Company. Owing to the crowded condition of the operators' training school in Atlanta, Ga., it became necessary to transfer the last class to Nashville, Tenn. The central training school is maintained at Atlanta. This class, which was started in August, graduated on October 8th, and were given a luncheon at the Commercial Club. At this dinner officers of the company discussed such subjects as "What the Traffic Department expects of the Graduates," "Personal Problems of the Commercial Department," and "The Company."

TRAINING COURSES OF THE CARNEGIE STEEL COMPANY

Last September the New System for the Training of Employees Was Inaugurated—The Training Course Covers a Period of Two Years—Schools Are Now Being Operated at Homestead, Edgar Thomson and Duquesne Works—Enrollment Large and Employees Enthusiastic to Increase Their Knowledge of the Business with Which They Are Associated.

Iron Age recently contained an account of the development of training in the Carnegie Steel Company. The training system was made effective last September. The company had conducted training courses prior to this time, but this training did not include technical courses, which are new. They are what are known as Works Schools. Through these schools the company aims to extend the advantages of a course of technical instruction in all phases of the manufacture of steel to all its workmen not technically educated. The course covers two years, and beginning with a brief preparatory period devoted, if necessary, to a study of the essential laws of physics and chemistry, it covers all the metallurgical processes used by the company. The time devoted to the preparatory period is varied to suit the education of the students on entering the course. One of the objects in starting these schools was to bring within easy reach of deserving and ambitious employees, who through force of circumstances have not been able to attend college, some of the advantages of a college education combined with a practical knowledge of the metallurgy of iron and steel. It was decided, therefore, to put the instruction work in the hands of a teacher with college experience, who could then be assisted by the superintendents and technical men in the mills. For this position Prof. John L. Acheson, formerly of the staff of the University of Pittsburgh, was selected.

The School a Plant Institution

A central school being impracticable, each plant has its own school, the management of which comes under the jurisdiction of the plant superintendent. The superintendent appoints a committee, composed of department heads and technically educated employees, to cooperate with the instructor, advertise the school among the employees, receive applications, and select the students for the various classes. Each plant has a lecture room, which is

furnished and equipped according to the wishes of the instructor and the requirements of the course. No tuition is charged, nor are the students required to spend any money for supplies, except for a special text book, which is supplied at the cost of printing. Any other books the student may wish to buy are also supplied at cost. For all time spent in attending the lectures and recitations the men are allowed full pay. Few prerequisites beyond a common school education are required for the course. The company is endeavoring thus to remove as many restrictions as possible, and to present impartially to all its employes an opportunity to learn the reasons for the practices of the mills.

While the schools are separate units as to the details of their management, they are also bound together as a unit in aims and ultimate results. This union is brought about by having but one supervising instructor, and by union meetings of the various committees. These meetings give opportunity for contact with the officials of the company, who may meet with the committeemen and discuss matters of policy pertaining to the general conduct of the schools. At such meetings the personal representative of the president is the head of the Bureau of Technical Instruction, established by the company several years ago—James M. Camp.

Three Schools Now Established

Until the details of the plan have been more fully worked out and its success assured, it was not considered good policy to start these schools in all the plants of the company at once. Up to the present time, therefore, these schools are in operation only at the three larger plants of the company in the Pittsburgh district, namely, the Homestead, Edgar Thomson and Duquesne works. At each of these plants the men taking the course are assembled twice a week, in classes of 20 each, for a period of instruction of not less than one hour. It was originally planned to have a new class of 20 men admitted every six months, so that by the end of 18 months each plant could have four classes taking the courses, or 80 men in all. This plan has been strictly adhered to at the Homestead and Edgar Thomson plants, but for experiment and other special reasons, at Duquesne all applicants were admitted at once, and these were sub-divided into three classes of about 20 each. The recitation and lecture periods occur between the hours of 8 A. M. and 6 P. M. The exact time of meeting for each class at the different plants is arranged to come at a period between the hours mentioned that is most convenient for the men and will cripple the mills the least. The supervising instructor visits these plants successively,

going to Homestead on Mondays and Thursdays, to Duquesne on Tuesdays and Fridays, and to Edgar Thomson on Wednesdays and Saturdays. An assistant instructor has already been appointed for the Duquesne school, but at Homestead and Edgar Thomson Professor Acheson is as yet able to give all the instruction in person.

While it is yet a little too early to judge, the success of these schools seems assured. The cooperation of the plant superintendents and their committees has been most gratifying, while the men taking the course are enthusiastic and loud in their praises. The great interest shown by all the employes is manifest from the number of applications received for the first classes, which began September 6. At the Homestead works, 250 men applied for admission to these classes, at the Edgar Thomson, 150, while at Duquesne 70 men were enrolled, and applications at all three plants are still coming in.

Besides the establishment of these works schools, which aim at the higher education of its employes, this company has also expanded in its other educational activities, some of which it has carried on for several years. These include the apprentice schools, in which young men are taught the various trades offering employment in the mills; the night schools, in which foreigners are taught English and the requirements for good citizenship, and others are offered courses in mathematics, mechanical drawing and the sciences; and the school for salesmen, in which the company's salesmen are given a brief but thorough course in the metallurgy of iron and steel. This last school has been in operation for the last ten years and has become a permanent institution with the company. A new feature introduced into the salesmen's school about three years ago is known as the "return" course for salesmen. This was instituted in order to give the salesman an opportunity to refresh his memory on things learned in the first course, and to become acquainted with improvements and changes in practice and products at the mills. The course covers four weeks only, but is an intensive one that requires rather strenuous effort on the part of the salesmen.

American Rolling Mill Co. to Aid in Housing Problem

The American Rolling Mill Company, of which George N. Verity is President, has announced that it will help to solve the shortage of workingman's houses by founding many "model villages."

One complete settlement has been laid out in Middletown,

Ohio, and upon which work will be begun in the spring, consisting of single and duplex houses, boarding houses, a club house, restaurants, streets and sidewalks, and sewer, water and electrical systems. Concrete construction is being used for all houses, on some of the roads and even for the sewers.

Ford Company Pays \$10,000,000 Bonuses

Bonus payments were made to Ford employees in November in excess of \$10,000,000. This is the company's answer to a statement emanating from Chicago which said the bonus would be eliminated.

It was declared further that Ford investment certificates, issued to employees last year, will carry an additional 3 per cent interest for the last six months of 1920, making a total of 14 per cent interest for the year.

E. I. du Pont de Nemours & Co. Start New Stock Subscription Plan

A new plan for stock subscription by employees, under which they will receive not only a fixed cumulative dividend but also a participating payment at a rate increasing with the net earnings of the company, has been announced by the E. I. du Pont de Nemours & Company. Under the new plan employees also will receive a service payment ranging from \$1 to \$4 a share annually, based upon the length of service credited to them.

The plan for the participation payments provides that if the net earnings are at a rate equal to or greater than 8 per cent, but less than 9 per cent a year, the payments would be \$1 a share. The payments increase as the earnings increase until 12 per cent is reached, when the participating payments would be \$5 a share.

Under the new plan any eligible employee may subscribe to stock equivalent to not more than four times his monthly salary, but to not more than twenty shares a year. The stock would be redeemed by the company at \$100 a share under certain conditions.

Naturalization Class of the Brighton Mills

The Brighton Mills, in connection with its Americanization work, conducts a Naturalization Class, the object of which is to be helpful to its alien employees who are about ready to ask for their final citizenship papers. The class meets weekly, and instructs in the principles of our Government and familiarizes the

alien with the forms necessary if they are to successfully pass their final examination for citizenship.

The Heart of the Worker Is Usually Right When He Understands

Due to the radicalism preached to the workers of this country by a relatively small number of their members, or perhaps more correctly speaking, of those who do not belong to the capitalistic or management classes, a feeling has grown up, especially since the close of the war, that the ideals and humanity of the workers have changed. This wrong impression is in part at least dissipated by a report from the Lynn Works of the General Electric Company where in three days 8,456 members were secured for the Red Cross. Not only did the employees of this plant respond quickly, but the number shows an increase of about 700 over the memberships taken in the same work for the Red Cross last year.

Personnel Notes from the Scovill Manufacturing Company

Upon recommendation of the Board of Governors, the Foremen's Association of this company has changed its By-Laws so as to admit assistant foremen and other employees of the company. It having been determined that the Foremen's Association was a good thing, there was a desire to extend the benefits to all who could profit from the activities of the Association.

The Scovill Manufacturing Company is proud over the fact that its Girls' Club enjoyed a larger growth during the past year than any similar organization in the State of Connecticut.

Employees of the Scoville Manufacturing Company are encouraged to attend a series of lectures arranged by the Visiting Nurses' Association, the series consisting of fourteen talks on public health.

In a discussion of training for skilled and semi-skilled employees, the editor of a Company Publication states it has been demonstrated that material increases in production and earnings paid to operators can be secured if those directly in charge of the operatives know the best way to instruct and train those under their care. Instances where special benefits have accrued are cited by the editor. A typical instance is here reproduced:

"Difficulty was being experienced in keeping new employees on a certain job. This job is admittedly a hard one. The foreman first made a job analysis of the job to determine just what was

needed—that is, the first thing to do, position of operator while at work, how best to pick up the work and put it in the machine, removing the work after the operation had been performed, study of the motions necessary to perform operation, condition of tools. The next thing was to properly instruct or train the tool setter to follow the job analysis as made because the tool setter was the man who came in direct contact with the employees. To properly instruct or train the tool setter the foreman found there were several things he did not know. By reading and asking questions he learned enough to accomplish his purpose. Before this training was done the contingent paid to the operatives was 22 per cent of the amount earned. As time went on this percentage decreased until it is now between 2 per cent and 4 per cent.

“Not only has the contingent decreased but the production has increased nearly 8 per cent with also an increase in the amounts earned by the operators. The turnover has stopped entirely.”

Industries and Educational Institutions Are Cooperating

Recently attention was called through the *BULLETIN* to an arrangement made by the Massachusetts Institute of Technology for a cooperative training plan between the Institute, its enrolled students, and the Lynn plant of the General Electric Company. The idea is spreading. The International Harvester Company has also arranged with the Massachusetts Institute of Technology and with Cornell University for a special five-year service, which it is felt will greatly extend the field from which men, information and ideas will be available for the betterment of the Harvester Company.

This arrangement gives to departmental staffs the use of libraries, files, and laboratories belonging to these institutions and their records regarding the qualifications, experience and special knowledge of alumni; assistance in locating original sources of information, and in finding men with special qualifications for permanent employment or for consultation on technical problems requiring extended investigation, tests or research work.

Enlarged Training Activities of the Illinois Steel Company

The object of the training department of the South Chicago Works of the Illinois Steel Company is “to promote the physical,

educational, social and civic welfare of the employees." In making this program effective, the company has now employed the full time services of an educational director, and new methods have been determined upon.

All instruction is to be individual and by company men. The work will be given free to all employes interested and in such a way that it will not interfere with their other duties. No class groups will assemble for instruction except for discussion and among the apprentices. No night classes will meet outside of work hours.

Reading and consultation rooms have been supplied with magazines selected by the men and their foremen. These may be read by any of the men who are off duty. These places will also serve later as stations where men may receive individual instruction.

Advice and guidance will be given along any line the individual may desire to study. The following are a few of the subjects which have been called for: Shop Mathematics and Arithmetic, English, Chemistry, Music, Machine Shop, Auto Mechanics and Repair, Blacksmithing, Carpentering, Cabinet Making, Physics, Mechanical Drawing, Mason Work, Metallurgy and Blast Furnace Practice.

More than 90 per cent of the men who have reported are interested in some form of personal development and the acquiring of an increased knowledge of mill practices.

President Campbell Takes Company Employees Into His Confidence

President James A. Campbell, of the Youngstown Sheet & Tube Company, believes in taking the employes of the company into his confidence. From time to time Mr. Campbell reviews business conditions in a company publication, which goes to all employes. This practice has been found very helpful, and an excellent method of avoiding misunderstandings.

Concluding a recent article, Mr. Campbell said:

"It is not likely that any general reduction in wages will come about for some time, but it will surely come later on—not, however, until the cost of living has been further reduced. In the meantime the workman who has steady employment should earn all he can and save his money by putting off buying as far as possible until a later date, when he will be able to get more for his dollar. I mean by this that anyone who can get along for a month or two without buying anything regarded as a neces-

sity, can probably buy such articles later to considerable advantage. Those who have been thinking of buying or building a home may find it profitable to wait until spring, as there is every indication that building costs are going to be lower. Lumber has been recently greatly reduced and undoubtedly reductions in other building materials will follow.

"What is needed more than anything else is economy, and, as was stated in a previous article, if this were practiced by every man, woman and child in this country for six months or a year, money would be cheap, business would resume at a normal rate, and everyone would have much more assurance concerning the future than they have at present.

"Prices of steel products are considerably lower today than they were thirty days ago, so that the margin of profit in our operations is now very small. We are hoping, however, for lower prices on coal, which has been unreasonably high. This would be of some help, but present costs of ore, limestone and freights will not change much over the next six or eight months, and during this time we shall be operating on a very close margin, and probably not to full capacity.

"In view of these facts, my advice to our employes is to work every day they have an opportunity and save as much money as they can. By doing this they will be in a much better position should conditions be such as to prevent us from operating all departments steadily during the winter."

Chicago Chapter

The first fall meeting of the Chicago Local Chapter took up the subject of cooperation between employers and the public schools. The discussion included:

1. Attitude of the school people toward corporation training.
2. Types of training.
3. Selling the proposition to both employer and employe.

Questions: Is the work of the Continuation school on the basis of graded or secondary schools?

Other meeting dates and subjects decided upon are as follows:

December 20—"Application of Psychological Tests and Rating Scales." Discussions will develop some practical phases of testing and their uses in connection with job analysis and job specifications. January 17—"Applied Training for Executives." The discussions will develop some practical phases of this problem and experiences along the lines of foremen's and supervisors'

classes. February 21—"Personnel Department in Industry." The discussion will develop some practical weaknesses and fallacies as well as the good points. March 21—"Methods and Plans of Vestibule Schools." The discussions will bring out some practical experiences along these lines and some of the more modern methods in connection with them, as well as touching upon trade apprenticeship schools. April 18—"A Study of Industrial Representation." The discussions will develop some practical aspects and results of various types of employe cooperative management systems. May 16—"The Subject for This Meeting Will Be a Surprise." Some special features will attend the occasion. Officers for the ensuing year will be elected at this time.

Avoiding Strikes Through Mutual Understanding

President J. S. Carr, Jr., of the Durham Hosiery Mills, is a believer in taking the mill employes into his confidence. In the company's publications President Carr discusses problems of interest to the stockholders, the management, and the employes. Perhaps this is one reason that the Durham Hosiery Mills does not have strikes or other labor troubles.

National Cash Register Employees Utilize Their Profits by Becoming Home Owners

The National Cash Register Company is operated on the profit sharing basis. Employes receive their portion of the profits at six month periods.

Recently the management was surprised and gratified to learn that many of the employes are turning their profit sharing dividends into homes. In the company publication the list of employes who are becoming home owners through this plan is given. One hundred and forty-four employes are listed, and the editor states that this is by no means a complete list.

President Herr Visits Company School and Addresses Employe Students

Students in the Westinghouse Technical Night School were agreeably surprised recently to receive a visit from Mr. E. M. Herr, president of the company.

Mr. Herr was personally conducted through the various departments of the school by C. S. Coler, President, A. B. Gibson, Manager, and Miss Edna I. Graham, Director of the Women's

Department, and expressed surprise at the progress of the school, which now has enrolled some 1,000 ambitious young men and women.

So great has been the growth of this institution that at present classes are held in the Educational Department of the W. E. & M. Co., East Pittsburgh, Union High School and Public School Buildings at Turtle Creek, and in the East Pittsburgh Public School Building on Electric Avenue.

In speaking to the Women's Department, Mr. Herr said that the best advice he could give to those who wished to progress was to "stick close to the Golden Rule."

After seeing the men of the Engineering School at work in the class room and laboratories, Mr. Herr addressed them in the assembly room, the theme of his talk being the value of cooperation, and the need for trained men today. He said the man who is willing to help others is always the one most helped, and that large companies like those represented by him are always looking for such men. At the close of Mr. Herr's talk the students responded by giving the school yell.

Arthur C. Jewett Personnel Superintendent for the Winchester Repeating Arms Company

Arthur C. Jewett has been appointed Personnel Superintendent for the Winchester Repeating Arms Company. Mr. Jewett came to that organization in 1916 as Production Superintendent of the Cartridge Department. After two years of service in this capacity, he was promoted to the Manufacturing Engineering Department, and eventually became Superintendent of Engineering. Mr. Jewett is a graduate of the Massachusetts Institute of Technology, and for a period was head of the Mechanical Engineering Department of the University of Maine. For some years he was connected as Chief of Staff with the firm of Bird & Sons, Walpole, Mass., and while in this position organized and developed various personnel activities, such as safety, educational courses, and other similar activities. He has always been greatly interested in personnel work, and was recently chosen as Chairman of the Southern New England Chapter of the Association.

Interest in Americanization Work at Schenectady Plant of General Electric Company

Americanization Secretary A. L. Hahn, of the Schenectady Works of the General Electric Company, reports that he has

frequently been asked if the many foreign students who enroll in the Americanization classes complete the course of study. In answer to the question Mr. Hahn states that last year twenty per cent of those who started the course dropped out. Nine per cent of those who did quit left the employment of the company, or classes had to be disbanded because of overtime work in the department. In reality only eleven per cent quit because they were not desirous of completing the course of instruction.

NEWSY NOTES

The Commonwealth Edison Company of Chicago has instituted new training courses for the benefit of employees in its construction department. One hundred and thirty-two men enrolled for the first class. This company also has adapted the plan of having executives lecture to enrolled employees. Authorities outside of the company are also secured to lecture upon subjects of general interest and helpfulness.

DIRECTORY OF LOCAL CHAPTERS

Chicago Chapter

F. E. WEAKLY, Chairman.

Montgomery Ward & Company,
Chicago, Ill.

MISS ANN DURHAM, Secretary-Treasurer.

Federal Reserve Bank of Chicago, Ill.

Southern New England Chapter

A. C. JEWETT, Chairman.

Winchester Repeating Arms Company, New Haven, Conn.

ROBERT H. BOOTH, Secretary-Treasurer.

Bridgeport Brass Company,
Bridgeport, Conn.

Pittsburgh Chapter

I. B. SHOUP, Chairman.

Westinghouse Elec. & Mfg.

Company, East Pittsburgh, Pa.

MR. W. D. MCCOY, Secretary-Treasurer, Board of Education, Pittsburgh, Pa.

Western New York Chapter

E. R. COLE, Chairman.

Acheson-Graphite Company,
Niagara Falls, N. Y.

H. E. PUFFER, Secretary-Treasurer.

Larkin Company, Buffalo, N. Y.

New York City Chapter

DR. L. F. FULD, Chairman.

Henry L. Doherty & Company,
New York, N. Y.

JOHN F. KELLY, Secretary-Treasurer.

The New York Edison Company, New York, N. Y.

CHAIRMEN AND DUTIES OF SUB-COMMITTEES

Application of Psychological Tests and Rating Scales in Industry

MISS ELSIE OSCHRIN, Chairman.

R. H. Macy & Company, New York City.

Duties:

- a. To again state the method of development of tests and to give a history of their current usage with concrete instances.

- b. To determine the indications for the continued and increasing use of tests in their application to employment and personnel problems.

- c. To make further report on the use of the Rating Scale.

Employment

MR. H. E. VON KERSBURG, Chairman.

R. H. Macy & Company, New York City.

Duties:

- a. To define the scope and functions of a standard employment department.
- b. To study the relation of the employment department to other sub-divisions of personnel work—training department, health department, welfare department, safety department, etc.; to study and report the relation of the employment department to production, accounting and financing, traffic, marketing.

Executive Training

DR. E. B. GOWIN, Chairman.
Litchfield, Nebr.

Duties:

To study successful plans for the selection and training of men for executive positions.

Foremen Training

MR. HARRY H. TUKEY, Chairman.
Submarine Boat Corporation,
Newark, N. J.

Duties:

- a. To define what are the scope and functions of foremen training.
- b. To establish definite aims and to frame content which will meet these aims.
- c. To discuss the merits of instructional methods.

Health Education

DR. E. S. MCSWEENEY, Chairman.
New York Telephone Company,
New York City.

Duties:

To make a study to determine best plans for health education and to recommend methods for the instructing of employes in the developing and maintaining of health.

Job Analysis

MR. HARRY A. HOFF, Chairman.
Federal Reserve Bank of New York, New York City.

Duties:

- a. To determine the influence of job analysis on the equitable establishment of wages.
- b. To determine human qualifications necessary for certain occupations.
- c. To determine methods in the selection of employes for specific jobs.

- d. To determine how best to utilize disabled men.
- e. To make a study of correlations in the establishment of specifications for the same kind of work in the same plant and in different plants.

Labor Turnover

MR. HUGO DIEMER, Chairman.
Winchester Repeating Arms Company, New Haven, Conn.

Duties:

To make a study of abnormal labor turnover of the present period due to the world war and how this extraordinary condition has been successfully met by certain industrial and commercial companies which have maintained a normal labor turnover.

Marketing

MR. W. E. FREEMAN, Chairman.
Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

Duties:

To make the application of training to the fundamentals of marketing as set forth in the Sub-Committee Report of 1919.

Office Work Training

MISS HARRIET F. BAKER, Chairman.
The New York Edison Co.,
New York, New York.

Duties:

To study the problems of training workers in small offices and departments and to suggest types of training adapted to them.

Profit-Sharing and Allied Thrift Plans

MISS HARRIET F. BAKER, Chairman.
The New York Edison Company, New York City.

Duties:

To study the relative merits of various thrift plans and to outline typical programs for promoting thrift.

Public Education

MR. C. E. SHAW, Chairman.
Dennison Manufacturing Company, Framingham, Mass.

Duties:

To suggest a scheme of standards for rating the graduates

of the public schools which will enable employers to judge more fully their fitness for their work.

Skilled and Semi-Skilled Labor

DR. A. J. BEATTY, Chairman.

American Rolling Mill Company, Middletown, Ohio.

Duties:

- a. To recommend a program for the developing of skilled and semi-skilled workers other than through apprenticeship.
- b. To recommend methods for training for semi-skilled and skilled workers.

Technical Training

MR. R. L. SACKETT, Chairman.

The Pennsylvania State College, State College, Pa.

Duties:

To continue the study of practical ways of securing co-operation between the industries and technical institutions:

1. By individual contact between the industries and the colleges;
2. By improvement in technical training methods;
3. By studying methods for the selection of men.

Trade Apprenticeship

MR. E. E. SHELDON, General Chairman.

R. R. Donnelley & Sons Company, Chicago, Ill.

Duties:

To suggest supplemental subjects which may well accompany the trade teaching of an apprentice school.

Section I—Manufacturing

MR. R. F. CAREY, Chairman.

Westinghouse Electric & Manufacturing Company, Lester, Pa.

Duties:

- a. To make a study of the economics of apprenticeship.
- b. To make a further study of the standardization of apprenticeship instruction.

Section II—Steel and Iron and Plant Maintenance

MR. JAMES R. BERRY, Chairman.

American Rolling Mill Company, Middletown, Ohio.

Duties

- a. To define the field for apprentice courses.
- b. To study the possible extension of apprenticeship courses.
- c. To outline typical courses.

Section III—Railroads

MR. J. H. YODER, Chairman.

The Pennsylvania Railroad Company, Altoona, Pa.

Duties

- a. To make a survey of the present status of trade apprenticeship in railroad shops.
- b. To recommend helpful suggestions for the improvement of existing conditions and possible enlargement of the field.

Training for Foreign Commerce

MR. C. S. COOPER, Chairman.

W. R. Grace & Company, New York City.

Duties

To study existing schemes of training for foreign commerce and to show the best methods employed.

Unskilled Labor and Americanization

MR. J. E. BANKS, Chairman.

American Bridge Company, Ambridge, Pa.

Duties

- a. To consider the problem of increasing the efficiency of unskilled labor.
- b. To continue the study of successful methods in Americanization work.

Visualized Training

MR. HOWARD M. JEFFERSON, Chairman.

Federal Reserve Bank of New York, New York City.

Duties

- a. To study the progress made in visualized training, particularly the progress that has been made in the last six years.
- b. To attempt to evaluate the work that has been done from an educational standpoint.
- c. To make suggestions regarding the ways in which visualized training may be used effectively in industry and in commerce.

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